

## ABSTRACT

A system and method is provided for dynamically controlling output voltage slew rate in a power converter. Preferred embodiments of the present invention operate in accordance with a power converter including at least a slew-rate control lead (a trim lead, a control lead, etc.), an error-amplifier circuit located therein, a slew-rate circuit, and a controller electrically connected to the power converter and adapted to dynamically control the converter's output voltage slew rate through the transmission of a slew-rate signal. In one embodiment of the present invention, the slew-rate circuit is external to the power converter and electrically connected to both a trim lead of the power converter and to the controller. In another embodiment of the present invention, the slew-rate circuit is internal to the power converter and electrically connected to both a control lead of the power converter and to the error-amplifier circuit. In either embodiment, the controller is adapted to transmit a slew-rate signal to the slew-rate control lead (i.e., the trim lead, the control lead, etc.), where the nature of the slew-rate signal is dependant on the configuration of the slew-rate circuit. For example, if the slew-rate circuit comprises a transistor and/or a capacitor, the slew rate signal may comprise a dynamically adjusted voltage or charge-based signal; if the slew-rate circuit comprises a resistor, the slew-rate signal may comprise a dynamically adjusted current-based signal; or if the slew-rate circuit comprises a digital variable resistor, the slew-rate signal may comprise a dynamically adjusted digital signal.